

## REMARKS

Claims 1-36 are pending in the present application. In the above amendments, claims 1, 8, 15, 18, 25, 32 and 35 have been amended. Support for the claim amendments may be found, for example, in paragraph [0010], lines 5-7, and in paragraph [0079], lines 1-3.

Claims 8, 15, 25 and 32 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have amended claims 8, 15, 25 and 32 to define the invention more clearly. As explained in the description, vector  $\theta$  is a scalar quantity for describing a type of training algorithms used. See, for example, paragraph [0077], lines 1-4. In one aspect, vector  $\theta$  may be defined as  $\theta = (L - 1)/n$ . See, for example, paragraph [0083]. Applicants respectfully submit that the claims as amended are now clear and request withdrawal of the rejection under 35 U.S.C. §112, second paragraph.

Claims 1, 3, 4, 5, 6, 11-13, 18, 20-23, 28-30, 35 and 36 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Publication No. 2003/0123406 to Yavuz et al. in view of U.S. Patent No. 5,606,580 to Mourot et al.

Applicants respectfully traverse this rejection.

Claims 2 and 19 lack an inventive step under PCT Article 33(3) as being obvious over Yavuz in view of Mourot and in further view U.S. Publication No. 2002/0102944 to Haim.

Claims 7, 8, 14, 15, 24, 25, 31 and 32 lack an inventive step under PCT Article 33(3) as being obvious over Yavuz in view of Mourot and in further view of WO 02/13448 A2 to Farlow.

Claims 9, 10, 16, 17, 26, 27, 33 and 34 lack an inventive step under PCT Article 33(3) as being obvious over Yavuz in view of Mourot and in further view of U.S. Patent No. 6,904,081 to Frank.

Applicants respectfully submit that the “inventive step” standard under the PCT Article 33(3) are not applicable in U.S. practice. Applicants believe the Office Action meant the above to be 35 U.S.C. §103(a) rejections, which Applicants would respectfully traverse.

Claim 1 has been amended to recite:

“A base station that adaptively allocates at least one resource between a traffic signal and a dedicated reference signal, comprising:

means for receiving a quality metric from a remote station, wherein the quality metric indicates the quality of a signal transmitted from the base station in a common reference signal and received by the remote station;

means for transmitting the dedicated reference signal and the traffic signal to the remote station,

wherein the received common reference signal and the received dedicated reference signal are used to train a receiver at the remote station.” (Amendments underlined.)

The Office Action repeatedly admits that “Yavuz did not teach expressly, allocates ... at least one resource ... between a traffic signal and a dedicated reference signal.” The Office Action further repeatedly admits that “Yavuz did not teach expressly, allocates ... at least one resource ... between a traffic signal and a dedicated reference signal and means for using the received common reference signal and the received dedicated reference signal to train a receiver at the remote station...” The Office Action contends, however, that Mourot “teaches in an analogous art, allocates at least one resource between a traffic signal and a dedicated reference signal ... and means for using the received common reference signal and the received dedicated signal to train a receiver at the remote station (Col. 1, lines 46-54).” (Emphases added.)

Applicants respectfully submit that Mourot is directed to a different invention and that one of ordinary skill in the art could not have possibly derived at the amended claimed invention from the teachings of Yavuz in combination with Mourot. As stated above, the Office Action already admitted that Yavuz does not disclose the claimed invention. As to Mourot, it is directed to a different invention for determining the optimal length of data sequences of a block in a TDMA communication system. More specifically, Mourot discloses using an estimation of the channel impulse response in a receiver for purposes of equalization. A feature of Mourot is its estimation method can be implemented in the receiver without requiring data or parameters other than those already transmitted in the data block. See, for example, column 2, lines 40-47. The Office Action cited column 1, lines 46-54, but Applicants could not find anything there relating

to the claimed invention. In other words, the combination of Yavuz and Mourot still does not disclose or suggest at least the following elements of the claimed invention as amended:

“means for using the quality metric to allocate a resource between the traffic signal and the dedicated reference signal...

wherein the received common reference signal and the received dedicated reference signal are used to train a receiver at the remote station.”

Applicants further submit that Haim, Farlow and Frank also do not disclose or suggest the above elements of the claimed invention as amended; they were not relied upon for the above disclosure. Applicants further note that there is no suggestion or motivation to combine any of the above-cited references as they are all directed to different inventions. As the Examiner is aware, in January 2005, the Federal Circuit decided in *KSR Intern. Co. v. Teleflex Inc.*, Supreme Court No. 04-1350, that there must be a suggestion or motivation to combine two or more references in an obviousness finding. This “teaching-suggestion-motivation test” has been a stalwart of Federal Circuit jurisprudence for twenty years. For at least the above reasons, Applicants respectfully submit that the combination of elements from Yavuz, Mourot, Haim, Farlow and Frank, in any combination of the references, do not disclose or suggest the claimed invention.

Independent claims 11, 18, 28, 35 and 36 include similar features to claim 1, and claims 2-10, 12-17, 19-27 and 29-34 depend from at least one of claims 1, 11, 18 and 28 so they all should be in condition for allowance for the reasons stated above.



PATENT

### REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all of the pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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